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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/774,381 | 02/10/2004 | Motoki Kato | 247987US | 9523 |

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

| EXAMINER | |
|---|---|
| DEBELIE, MITIKU W | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2621 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 09/17/2007 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/774,381 | KATO ET AL. | |
| | Examiner | Art Unit | |
| | Mitiku Debelie | 2621 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *10 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 - 16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/29/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on 11/29/2005 has been considered by the examiner.

### *Double Patenting*

### *Obvious Type Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 – 16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1, 10, 12, 19 and 24 of U.S. Patent No. 6,950,604. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

| **Claim 1 if Application No. 10/774,381** | **Claim 1 of U.S. patent No. 6,950,604** |
|---|---|
| A transport stream recording apparatus comprising: | A transport stream recording apparatus for recording a transport stream on a recording medium, comprising: |
| an input unit operable to input a transport packet constituting said transport stream; | a detector configured to detect, from a transport packet constituting said transport stream, a system time clock (STC) discontinuity point in said transport stream; |
| a generator operable to generate program sequence information indicative | a generator configured to generate STC sequence information indicative of the sequence of transport packets |

| | |
|---|---|
| of an interval in which a program attribute in said transport stream does not change; and | that includes no STC discontinuity in accordance with said STC discontinuity point, wherein said STC sequence information includes information defining a time axis of an STC sequence and information corresponding to a start point and an end point of said time axis; and |
| a recording unit operable to record said program sequence information along with said transport stream | a recording unit configured to record said transport packet onto said recording medium along with said STC sequence information. |

It is noted that claim 1 of this application is broader than and encompasses claim 1 of U.S. Patent No. 6,950,604.

| Claim 2 if Application No. 10/774,381 | Claim 10 of U.S. patent No. 6,950,604 |
|---|---|
| A .transport stream recording apparatus according to claim 1, | A method of recording a transport stream comprising the steps of: detecting, from a transport packet constituting said transport stream, a system time clock (STC) discontinuity point in said transport stream; |
| wherein said generator generates program sequence information indicative of the sequence of transport packets that includes no PCR_PID discontinuity | generating STC sequence information indicative of the sequence of transport packets that includes no STC discontinuity in accordance with said STC discontinuity, wherein said STC sequence information includes information defining a time axis of an STC sequence and information corresponding to a start point and an end point of said time axis; and recording said transport packet onto said recording medium along with said STC sequence information. |

Note the comparison above; claim 2 of the instant application reads on claim 10 of U.S. Patent No. 6,950,604. The limitations, "generator" of claim 2 of this application and "generating STC" of claim 10 of U.S. Patent No. 6,950,604 are substantially identical with each other. (The term "PCR_PID", as defined in the specification, is a bit level representation the system time clock (STC). Therefore discontinuity in STC means discontinuity in the in the PCR_PID.)

Regarding claim 3, claim 3 recites, "A transport stream recording apparatus according to claim 1, wherein said generator generates program sequence information indicative of the sequence of transport packets that includes no change of the number of video and/or audio elementary streams." This claim reads on claim 1 of U.S. Patent No. 6,950,604 analyzed above. (The number of video and/or audio elementary stream (payload) received with no change from what is specified by the packet header is indicative of whether there is a discontinuity on the STC).

Regarding claim 4, claim 4 recites, "A transport stream recording apparatus according to claim 1, wherein said generator generates program sequence information indicative of the sequence of transport packets that includes no discontinuity of packet identifier of each video and/or audio stream." This claim reads on claim 1 of U.S. Patent No. 6,950,604 analyzed above. (No discontinuity on packet identifier is indicative of no discontinuity on the STC).

Regarding claim 5, claim 5 recites, "A transport stream recording apparatus according to claim 1, wherein said generator generates program sequence information

indicative of the sequence of transport packets that includes no change of the coding attribute of each video and/or audio stream." This claim reads on claim 1 of U.S. Patent No. 6,950,604 analyzed above. (Program attribute is the same as coding attribute).

Regarding claim 6, claim 6 recites, "A transport stream recording apparatus according to claim 5, wherein said coding attribute includes video frame frequency."

It is old and well known in the art to include video frame frequency (frame rate) in coding attribute of video signal. Official notice is taken.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include video frame frequency in coding attribute in order to properly reproduce the video images in a manner that represents the recorded signal.

Regarding claim 7, claim 7 recites, "A transport stream recording apparatus according to claim 5, wherein said coding attribute includes aspect ratio."

It is old and well known in the art to include aspect ratio in coding attribute. Official notice is taken.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include aspect ratio in coding attribute in order to be able to reproduce the signal with a display method/device with the right aspect ratio.

Regarding claim 8, claim 8 recites, "A transport stream recording apparatus according to claim 5, wherein said coding attribute includes audio coding method." This claim reads on claim 24 of U.S. Patent No. 6,950,604. (The audio analyzer described in relation to claim 24 includes audio coding method).

Regarding claim 9, claim 9 recites, "A transport stream recording apparatus according to claim 5, wherein said coding attribute includes audio component type." This claim reads on claim 24 of U.S. Patent No. 6,950,604. (The audio analyzer described in relation to claim 24 includes audio component type).

Regarding claim 10, claim 10 recites, "A transport stream recording apparatus according to claim 5, wherein said coding attribute includes sampling frequency."

It is old and well known in the art to include sampling frequency when transmitting data over a medium in order to facilitate reception of the signal at the receiving end. Official notice is taken.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include sampling frequency in coding attribute.

Regarding claim 11, claim 11 recites, "A transport stream recording method, comprising the steps of." receiving a transport packet constituting said transport stream; generating program sequence information indicative of an interval in which a program attribute in said transport stream does not change; and recording said program sequence information along with said transport stream." This claim reads on claim 1 of U.S. Patent No. 6,950,604.

Regarding claim 12, claim 12 recites, "A transport stream reproducing apparatus for reproducing a transport stream recorded on a recording medium, comprising a reproducing unit Operable to reproduce said transport stream and program sequence information from said recording medium, said transport stream including a sequence of transport packets, said program sequence information indicating the sequence of

transport packets that includes no program attribute discontinuity; a processor operable to generate output signal to be presented; and a controller operable to control the processor on the basis of the program sequence information." This claim reads on claim 19 of U.S. Patent No. 6,950,604 with the exception of the limitation "sequence of transport packets that includes no program attribute discontinuity" which is analyzed in relation to claims 2 – 5 above.

Regarding claim 13, claim 13 recites, "A transport stream reproducing method for reproducing a transport stream recorded on a recording medium, comprising the steps of: reproducing said transport stream and program sequence information from said recording medium, said transport stream including a sequence of transport packets, said indicating the sequence of transport packets that includes no program attribute discontinuity; generating output signal to be presented; and controlling the generating step on the basis of the program sequence information." This claim reads on claim 19 of U.S. Patent No. 6,950,604 with the exception of the limitation "generating output signal to be presented" which reads on claim 12 of U.S. Patent No. 6,950,604.

Regarding claim 14, claim 14 recites, "A storage medium having a computer program code mechanism embedded in the computer storage medium for performing a method for recording a transport stream, the computer program code mechanism performing the steps of: receiving a transport packet, said transport stream including said transport packet; generating program sequence information indicative of an interval in which a program attribute in said transport stream does not change; and recording said program sequence information along with said transport stream." This claim reads

on claim 1 of U.S. Patent No. 6,950,604 with the exception of the limitation "an interval in which a program attribute in said transport stream does not change" which is analyzed in relation to claims 2 – 5.

Regarding claim 15, claim 15 is an apparatus claim corresponding to the method claim 13. Therefore claim 15 is analyzed and rejected as previously discussed with respect to claim 13.

Regarding claim 16, claim 16 recites, "A storage medium storing program sequence information for use in an apparatus for reproducing a transport stream recorded on a recording medium, said apparatus comprising a reproducing unit configured to reproduce said transport stream and program sequence information, said transport stream including a sequence of transport packets, a processor configured to generate output signal to be presented, and a controller configured to control the processor based on the program sequence information, said program sequence information comprising: information indicating the sequence of transport packets that includes no program attribute discontinuity." This claim reads on claim 19 of U.S. Patent No. 6,950,604.

## *Inquiry*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitiku Debelie whose telephone number is (571) 270 1706. The examiner can normally be reached on Mon - Fri 8:00 - 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272 7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD
08/23/2007